What is claimed is:

1. A method for inhibiting cholesterol uptake in the gut comprising the step of administering to an individual an inhibitor of annexin 2 or a complex of annexin 2 and caveolin 1.

2. A method for lowering levels of LDL cholesterol in an individual comprising the step of administering to that individual an agent which reduces the activity of annexin 2 or a complex of annexin 2 and caveolin 1.

3. The method of claim 2, wherein the agent acts by disrupting complex formation.

4. A method for identifying drugs that can lower serum cholesterol levels comprising assaying the drug to test if it can disrupt a complex of caveolin I and/or annexin 2.

5. A method for reducing transport of cholesterol from the gut to the blood comprising administering an annexin 2 or a complex of annexin 2 and caveolin 1 modulating compound to an animal and thereby reducing such transport.

6. A screening assay for determining whether a candidate compound is useful for reducing transport of cholesterol from the gut to the blood or lymph, or for lowering LDL or serum cholesterol levels comprising (a) providing an assay system having a measureable biological activity of annexin 2 or a complex of annexin 2 and caveolin 1; (b) contacting the assay with the candidate compound; and (c) measuring biological activity, wherein modulation of biological activity, relative to an assay not contacted with the candidate compound, indicates that the candidate compound is useful for the treatment of said disease or condition.

7. The screening assay of claim 6, wherein the assay system is a cell based system.

8. The screening assay of claim 6, wherein the assay system is a zebrafish based system.

9. The screening assay of claim 6, wherein the assay system is a cell free system.

10. A screening assay for identifying a substance to be tested for an ability to reduce transport of cholesterol from the gut to the blood or lymph, or for lowering LDL or serum cholesterol levels comprising assaying the ability of the substance to modulate expression or activity of the annexin 2 or a complex of annexin 2 and caveolin 1 by

(a) exposing a subject or cell to a test substance;

(b) assaying the expression level of, or the activity of, the annexin 2 or a complex of annexin 2 and caveolin 1 in the subject or cell and a control subject or cell which is not exposed to the test substance; and (c) comparing the expression level of or the activity of the annexin 2 or a complex of annexin 2 and caveolin 1 in the subject or cell to the control subject or cell, wherein a test substance that modulates expression or activity of the annexin 2 or a complex of annexin 2 and caveolin 1 is a substance to be tested for an ability to ameliorate said disease or condition.

11. A compound for reducing transport of cholesterol from the gut to the blood or lymph or for lowering LDL or serum cholesterol levels identified by a screening assay wherein such compound antagonizes the biological activity of annexin 2 or a complex of annexin 2 and caveolin 1.

12. The compound of claim 11, wherein such compound is administered orally.

13. A compound useful for reducing transport of cholesterol from the gut to the blood or lymph, or for lowering LDL or serum cholesterol levels identified by (a) providing an assay system having a measureable biological activity of annexin 2 or a complex of annexin 2 and caveolin 1; (b) contacting the assay with the candidate compound; and (c) measuring biological activity, wherein

reduction of biological activity, relative to an assay not contacted with the compound, indicates that the candidate compound is so useful.

14. A screening assay for determining whether a candidate compound is useful for reducing transport of cholesterol from the gut to the blood or lymph, or for lowering LDL or serum cholesterol levels comprising contacting a zebrafish larvae with a labeled cholesterol and a test compound; and measuring the uptake of the labeled cholesterol, wherein a decrease in cholesterol uptake, compared with a control without the test compound, indicates that the candidate compound is useful for the treatment of said disease or conditions.